

**Challenges in the development of a social science lab in Argentina revisited. The experience of CEIA / FLACSO Argentina**

by Joon Hee Bang

## **1. PRESENTATION**

The Center for Applied Statistics and Computing, CEIA for its acronym in Spanish, is an independent program settled at the Argentinian headquarters of FLACSO (acronym in Spanish for Latin American Faculty of Social Sciences). FLACSO is an international Faculty, borne in 1957 from an initiative of UNESCO with the status of an international, intergovernmental, regional and autonomous organization mainly based on the participation of Latin American and Caribbean countries. FLACSO currently has academic headquarters and programs in 13 countries.

CEIA was created in 2001 from an initial agreement between the Department of Economy and Technology of FLACSO and IDES (acronym in Spanish for Institute for Economic and Social Development); from which it has become independent in 2018 settling at FLACSO Argentina as an independent academic program.

### ***Objectives***

Initially, the CEIA's main objective was the diffusion of statistical and computer tools applied to social sciences among the graduate community.

This general objective was broken down into three strategies with their own specific objectives.

- a) Designing and developing a set of graduate courses based on the applied tools for social research (academic offer).
- b) Developing a consulting area to apply and eventually to carry out consulting projects for state agencies or international ones and civil society organizations (consulting works).
- c) Researching, studying and updating of new methods and tools for social research (research and update).

Over the course of CEIA's nineteen years of existence, we have adjusted these specific objectives, mainly including the qualitative methodology since we believe that the research methodology is one, integrating both qualitative and quantitative methods.

In academic terms, the following list of graduate courses along the last 19 years allows appreciate the specificity and particularities of our academic work.

#### **Applied Statistics Courses (Applied Statistics to Social Sciences Program)**

- Statistical methods for the social sciences I (Descriptive Statistics, Basic Probability, Estimation and Hypothesis Test)
- Statistical methods for the social sciences II (Association: quantitative and qualitative variables)
- Sampling

#### Applied Computing Courses

- Social data processing with SPSS statistical package
- Computer-aided qualitative data analysis: The ATLAS.ti Software
- Preparatory course for certification as official trainer granted by the ATLAS.ti Headquarters
- Introduction to data science with R
- Introduction to R for Social Sciences
- The utilization of the SPSS Statistical Package in Statistical Analysis
- The Utilization of Geographic Information Systems in the Social Sciences. The QGIS software
- Introduction to the use of the STATA statistical package
- STATA statistical software. Advanced level: Programming for non-programmers

#### Applied methodology courses for the analysis of substantive social topics

- Methodology for gaps and social inequalities analysis
- Work market analysis
- Educational statistics. The right to education and its measurement based on educational indicators
- Statistics and sources of health information
- Statistical and Big Data techniques applied to the study of public opinion and electoral behavior
- Big Data methods for social sciences and public policies
- Logical framework methodology in the formulation and evaluation of social programs and projects
- Questionnaire design: Applying Instruments in Empirical-based Social Research

#### Specific courses for the utilization of official databases from the National Institute of Statistics and Censuses (INDEC for its acronym in Spanish)

- Utilization and analysis of Permanent Households Survey
- Utilization and analysis of National Household Expenditure Survey

#### Qualitative methodology courses

- Qualitative Applied Techniques Workshop

With regard to the objective of developing consultancy work, CEIA has carried out different consultancies for different state ministries (Social Development and Health Ministries), international organizations (such as UNICEF, UNDP) and civil society organizations. This consultancy work has been mainly focused on monitoring and evaluation of social policies.

Finally, regarding our third objective, graduate courses, jointly with consulting work, constitute CEIA's main funding sources. Until now, all the funds raised has been aimed to pay work as CEIA never has never sought profit. On the contrary, CEIA had settled a strategy of low costs either for graduate training instances and for consultancy as well. The latter allowed CEIA to reach large quantity of students on a regular basis, but hindered the accumulation of the necessary resources to encourage and financing independent projects linked with our internal researching, studying and updating objectives.

## 2. INITIAL CHALLENGES

### *Base line diagnosis*

The creation of CEIA was originated from an initial diagnosis about the field of Social Sciences. In general terms and recognizing multiple exceptions, this diagnosis included the following characteristics:

- Privilege of theoretical training and scarce methodological training in university careers in Social Sciences.
- Applied methodology mainly present in the field of market research
- Lack of institutional spaces and opportunities for methodological discussion
- Demand for updating with applied computer tools (after a decade of massive access to personal computers) in Social Sciences area
- Specific demands of applied research methodologies and statistics and computer tools either in social sciences research field as in state agencies and programs

### *Initial Challenges*

From this initial diagnosis, the CEIA Program posed for itself the following challenges that, in turn, tailored to its institutional objectives:

- Build an institutional space for the dissemination of social sciences methodologies and tools (statistical and informatics) with emphasis on their applied nature.
- This institutional space was particularly intended for the complementation and updating of undergraduate and postgraduate studies for both recently graduated professionals and researchers in the social sciences. It would also be particularly oriented to support the public sector, especially in processes of monitoring and evaluation of social policies.
- Become a reference center, in general terms, in the application of social science methodologies and particularly in applied statistics and computer tools for the social sciences community and public sector.
- Achieve gradual development based on autonomous financing

The main asset to face these initial challenges was the practical experience of concrete application of social research methodology and the tools in academic research fields and institutional spaces related to social policies, in which CEIA had individually worked as interface between specific research requirements and statistical knowledge and computer tools. In this sense, CEIA always believed that the applied nature of social science research tools is fundamentally associated with the interface function between research needs and objectives and technical tools, both statistical and computer-based and methodological in general.

### 3. NINETEEN YEARS BALANCE AND NEW CHALLENGES

Close to CEIA's 20 years of life, the balance is modestly positive. The initial challenges have been the north both for the development of the installed activities and for the design and implementation of new projects. Although radical changes have not been placed with respect to the initial diagnosis acknowledged in the introduction, CEIA's presence and work in the academic community of the social science made a small contribution towards the development of greater interest in the social science methodology and applied research tools. The increasing demand for training verified reveals not only the correctness of the initial diagnosis and the accuracy of initial challenges, but, in turn, indicates the growth of interest in methodological and computer tools applied in the community of social sciences in Argentina.

Our main achievements can be seen in:

- The maintenance, diversification and growth of our academic offer.
- An increasing growth of our enrollment associated with the growth and diversification of our academic offer, reaching an average of 200 students per year considering the last 3 years.
- The consequent formation of a teaching team in constant consolidation.
- A subsequent increasing recognition as a reference point for training in some topics such as applied statistics, application of computer tools in social research (SPSS, STATA, ATLAS, ti and more recently R).
- The successful completion of several consulting projects that has contributed to the construction of an institutional resume that makes CEIA eligible for new projects by funding agencies.
- The establishment of a Laboratory of Qualitative Methodology based on an agreement signed with ATLAS.ti.
- Training of human resources through assistantships and small experiences of internal training.
- The achievement, in another order of things, of a certain income regularity that has remained more or less stable through different economic cycles that has allowed up to now the maintenance of a minimum structure of human and physical resources

These main achievements reveal that the most developed and fulfilled objectives in CEIA's lifetime has been the first two of them: academic offer and consulting work. The third objective, requiring the availability of specific funds or surplus income, has been the least developed so far.

### ***New challenges and objectives***

Based on the learning of these 19 years and the institutional maturity that CEIA has been shaping, currently CEIA is reaffirming the initial challenges and objectives and considering new ones as well.

Among new challenges and objectives, CEIA is trying to assume the following ones:

- Moving towards a degree (specialization, diploma or master) from the integration in a curriculum of a set of initial proven courses.
- Supporting to social research in general and to graduate and undergraduate thesis
- Promoting and enriching methodological and statistical/informatics tools application discussion
- Become a reference point not only in applied statistics and computer tools but in the application of quantitative and qualitative methodology as well.
- Encouraging an expansion of demand for training through virtualization of courses
- Assuring enough funds to finance independent projects and training strategies.
- Seeking the means to ensure stable and sufficient funds to maintain a full-time dedicated staff and, on the other hand, to finance the training of new professionals and researchers.
- Designing and developing observatory-type studies - in order to make social processes and demands visible.
- Engaging and promoting the development of different types of networks.

Finally, it is important to stress that one of the most relevant challenge at the present moment is the dissemination of big data analysis based on the principles of social sciences research, that is, the development of theory, hypotheses framed in it and the analysis of data based on the latter.

This big data phenomenon, arising mainly from the accelerated advancement and development of technology (especially hardware), allows and often encourages the inverse path that goes from data results to theory, the path of data analysis without a theoretical framework, the path of "hypothesis formulation" from results. CEIA considers that, in this context of tension between the pragmatism of the search for "explanatory" models independent of theoretical frameworks and the principles of social research, laboratories in social sciences must play a preeminent role by combining theoretical and methodological knowledge of social sciences with the knowledge and management of the applied computer tools available for the analysis of big data.